

Science Communication: Giving Group Meeting

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Different types of group meeting

- Small group (One PI)
 - Informal – round table discussion by one individual or multiple participants
 - Formal – powerpoint presentation
- Large group (Multiple PI's)
 - Formal – powerpoint presentation



➤ Talk to your mentor to see what type of group meeting presentation you should prepare

Organization of a Science Talk

- Title Slide
- Introduction
- Methods
- Experiments/Results/Data
- Discussion and Conclusion
- Acknowledgements Slide
- Questions?

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Which section is the most important?

Title Slide

Concise Title for Talk

Your name
Your affiliation (lab/school/institute)
The date (optional)

Introduction

The content:

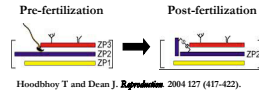
- What are you investigating?
- Why are you interested in this?
- Why should we be interested?

Introduction

The content:

- What are you investigating?
- Why are you interested in this?
- Why should we be interested?

Slides with cartoons and images are helpful



If showing published data, make sure you cite the reference!!!

Methods

- What approach did you take to address your problem?
- How is it unique from previous approaches?
- How did you optimize conditions?
- Did you troubleshoot?

Example Methods Slide – DNA microinjection into mouse oocytes

1. Ovaries are harvested from 12-14d FVB mice

<http://www.criver.com>
2. Follicles are punctured to isolate oocytes

<http://www.research.uci.edu/tmf/dnaMicro.htm>
3. DNA is microinjected into GV

<http://www.research.uci.edu/tmf/dnaMicro.htm>
4. Injected oocytes are incubated at 37 C with 5% CO₂ for ~40hrs

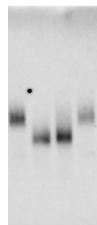
<http://med.ucm.edu>
5. Injected oocytes are fixed, stained with antibody against CGP, LCA-FITC, and Hoechst, and visualized by confocal microscopy

<http://med.ucm.edu>

Results

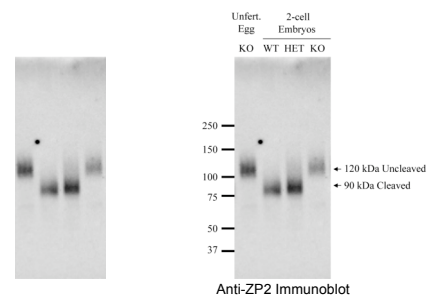
- Be brief and clear
 - Remember your audience
 - Be selective
- Present your work as a story
- Talk the audience through your data
 - Figures
 - Graphs
 - Gels
- Everything must be labeled
- Put the punchline on each slide

Results – Labeling figures

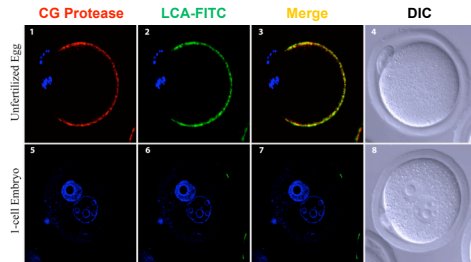


Results – Labeling figures

Better figure:



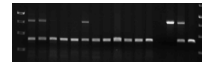
Results – Labeling figures cont.



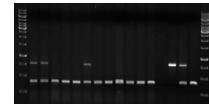
Use color appropriately!!!

Results – Cropping and simplifying figures

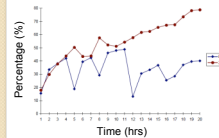
Show this:



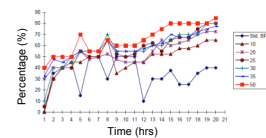
Not this:



Show this:



Not this:



Results – Tables

Table 6. Demographic characteristics of children with full syndrome autism, by older and younger birth cohorts, Autism Epidemiology Study.

Characteristic	Birth Year 1983-85 (N=100)	Birth Year 1993-95 (N=161)	p-value
Male sex	90.4%	83.7%	0.08
Race/Ethnicity*:			
White	68.3%	78.3%	0.12
African-American	8.9%	7.4%	0.68
Asian/Pacific Islander	19.5%	14.5%	0.40
Native American	3.5%	3.0%	0.82
Hispanic	27.6%	39.0%	0.06
Parent educational level:			
Father with high school diploma or higher	87.0%	77.6%	0.06
Father with college associate's degree or higher	40.3%	38.7%	0.81
Mother with high school diploma or higher	86.5%	89.1%	0.54
Mother with college associate's degree or higher	35.5%	33.3%	0.70

http://www.dds.ca.gov/Autism/docs/5study_aims_4-6.pdf

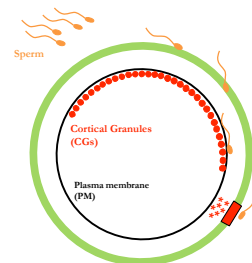
Summary/Conclusions

- Condense major results and their implications into bullet points
- Connect back to introduction
- Limit number of points
- If you have a model, present in cartoon form (optional)

Sample conclusion slide – The Fertilization Process

1. Fertilizing sperm encounter ovulated eggs in the oviduct
2. Sperm-egg recognition and binding
3. Zona penetration
4. Sperm fusion
5. Cortical granule exocytosis induces zona block to penetration and ZP2 cleavage: **NO MORE SPERM BINDING**

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Acknowledgements

List the names of people who helped
you

- Your mentor(s)
- Lab members
- Collaborators
- People who provided reagents
- Funding source

How many slides do you need?

- 🎤 1 slide/ 30 seconds
- 🎤 1 slide/ 1 minute
- 🎤 1 slide/ 2 minutes
- 🎤 It depends

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Tips for Slide Preparation - Color

Color Choice:

Best choices for good visibility:

Dark colors on white or light background
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White or yellow on dark background

Never use yellow on white background

**Avoid using blue/red on a dark
background**

Tips for Slide Preparation - Fonts

- Use large, clear font
- 14-16 point minimum (this is 28)
 - Small fonts are hard to see (12 point)
 - Even smaller fonts are impossible to see (8 point)
- Fancy fonts are hard to read
- **Bold increases readability**
- **AVOID USING ALL CAPITAL LETTERS
BECAUSE IT'S MUCH HARDER TO
READ**

Tips for Slide Preparation - Text

- Rule #1: Limit text
- Use bullet points
- No paragraphs
- Consider bringing in text one line at a time
- All text must be readable
- Check for typos
- Example of a boring slide

This Is Some Important Point

- ✓ One amazing fact that you didn't realize
- ✓ Another amazing fact that maybe you knew, but didn't realize was relevant
- ✓ A third fact that you might have known, but didn't realize was relevant
- ✓ And, of course, a fourth fact that needs to be stated because you can't just say 4 and expect them to remember
- ✓ And a fifth point, just for luck
- ✓ Oh, and did I mention point #6 too?
- ✓ And there's an important conclusion too

Dealing with Questions

- Be prepared for interruptions
- Clarify the question if you don't understand
- Pause and think before you answer
- Be polite
- Keep your answers brief
- It's OK not to know the answer – do not try to make something up!

Helpful hints:

- Practice! Practice! Practice!
- Memorize your first few slides
- Take deep breaths
- Bring a water bottle
- Bring your lab notebook
- Remember: you are the expert on your own project!

Thanks!

If you need any additional help, feel free to contact me:

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